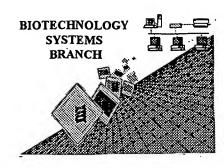
5630 H

## RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: /0/009/23
Source: Pur/lo
Date Processed by STIC: ///4/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- Hand Carry directly to:
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
  - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, r other delivery service t: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/009, 723
attn: new rules cases	: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFI
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
SVariable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in Patentin version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, Palentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences' (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
0Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
IUse of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
2PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
3Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

PCT10

```
DATE: 01/14/2002
                                                           RAW SEQUENCE LISTING
                                                                                                                                                                            TIME: 07:56 Does Not Comply
                                                            PATENT APPLICATION: US/10/009,723
                                                                                                                                                                                               Corrected Diskette Needed
                                                            Input Set : A:\ES.txt
                                                           Output Set: N:\CRF3\01142002\J009723.raw
                  3 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD
                 5 <120> TITLE OF INVENTION: Diagnostic and therapeutic agents for the diseases related
 monocytes and
                                       macrophages
                 8 <130> FILE REFERENCE: 11214W01
 \mathbb{C}Y-> 10 <140> CURRENT APPLICATION NUMBER: US/10/009,723
       => 11 <141> CURRENT FILING DATE: 2001-12-17
               13 <150> PRIOR APPLICATION NUMBER: H11-171709
              14 <151> PRIOR FILING DATE: 1999-06-17
              16 <160> NUMBER OF SEQ ID NOS: 92
               18 <170> SOFTWARE: PatentIn Ver. 2.0
 ERRORED SEQUENCES
               100 <210> SEQ ID NO: 3
               101 <211> LENGTH: 409
              102 <212> TYPE: DNA
              103 <213> ORGANISM: Mus musculus
              105 <220> FEATURE:
              106 <223> OTHER INFORMATION:
              108 <220> FEATURE:
                                                                                                                                                                                     (global eva)

aca ggt 48

Thr Gly
-S & misaligned amino
gtg agg 96

Val Arg

aca ttt 144

Thr Phe

ggc ctg 192

Gly Leu

aca aat 240

Yr Asn

(global eva)

(global eva)

(global eva)

(sei dim)

(se
              109 <221> NAME/KEY: CDS
              110 <222> LOCATION: (1)..(408)
              112 <400> SEQUENCE: 3
              113 atg gga ttc agc agg atc ttt ctc ttc ctc ctg tca gtg act aca ggt 48
              114 Met Gly Phe Ser Arg Ile Phe Leu Phe Leu Ser Val Thr Thr Gly
                                                    -15 -15
                                                                                                                           -15-10
                                                                                 -10-
              116 gtc cac tcc cag gct ttt cta cag cag tct ggg gct gag ctg gtg agg 96
              117 Val His Ser Gln Ala Phe Leu Gln Gln Ser, Gly Ala Glu Leu Val Arg
              118 (-1 1 5 10 pame luw)
119 cct ggg gcc tca gtg aag atg tcc tgc aag gct tct ggc tac aca ttt 144
W--> 118
              120 Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe
W--> 121 ( 15
                                                                   20
                                                                                                    25
                                                                                                                                     sand
              122 atc aat tac aat atg cac tgg gta aag cág aca cct aga cag ggc ctg 192
              123 Ile Asn Tyr Asn Met His Trp Val Lys Gln Thr Pro Arg Gln Gly Leu
                                                           35
                                                                                             40
                                                                                                                               45
                                                                                                                                           sane
              125 gaa tgg att gga gct att ttt cca gga aat ggt ttt act tcc tac aat 240
              126 Glu Trp Ile Gly Ala Ile Phe Pro Gly Asn Gly Phe Thr Ser Tyr Asn
                                                                                                                                                  same
W--> 127
                                                 50
                                                                                    55
                                                                                                                     60
              128 cag aag ttc aag ggc aag gcc aca ctg act gta gac aaa tcc tcc agc 288
              129 Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser
                                                                                                                                         sane
             131 aca gto tac atg cag cto cgc ago ctg aca tot gaa gao tot gog gto 336, which a hard 132 thr (Val Ctyr Met Aln Leu Arg Aer Leu Ahr Arg All Care and State a
E--> 132 thr (val (tyr met gln Leu drg Ger Leu thr Ger glu dasp Ser dla (val
E--> 133 85 90) misslend
E--> 133 85 90 musalified
E--> 134 tat ttc tgt gca aga gat ggt gac tat tac ttt gac tac tgg ggc caa 384
              185 Tyr Phe Cys Ala Arg Asp Gly Asp Tyr Tyr Phe Asp Tyr Trp Gly Gln
                           enitial letter of amend aid is always in upper-case letter
```

TIME: 07:56:07

Input Set : A:\ES.txt Output Set: N:\CRF3\01142002\J009723.raw 105 misabgred W--> 136 (95 E--> 137 ggc acc act ctc aca gtc tcc tca g 409 138 Gly Thr Thr Leu Thr Val Ser Ser Per 1.822 o) Seguerce
Rube, number the
amend acids under
every 5 amend
acids
acids (17) misalgred E--> 139 110 **115** 179 <210> SEQ ID NO: 180 <211> LENGTH: 5 181 <212> TYPE: PRT 182 <213> ORGANISM: Mus musculus 184 <220> FEATURE: 185 <223> OTHER INFORMATION: 187 <400> SEQUENCE: 5 188 Ser Asn Tyr Ile Ser (5) 191 <210> SEQ ID NO: 6 192 <211> LENGTH: 17 193 <212> TYPE: PRT global enor) 194 <213> ORGANISM: Mus musculus 196 <220> FEATURE: 197 <223> OTHER INFORMATION: 199 <400> SEQUENCE: 6 200 Trp Ile Tyr Ala Gly Thr Gly Asp Ala, Sex Tyr Asn Gln Lys Phe Thr E--> 201 1 10 15 202 Ala 203 17 205 <210> SEQ ID NO: 7 206 <211> LENGTH: 10 207 <212> TYPE: PRT 208 <213> ORGANISM: Mus musculus 210 <220> FEATURE: 211 <223> OTHER INFORMATION: 213 <400> SEQUENCE: 7 214 His Gly Gly Asp Gly Tyr Trp Phe Ala Tyr /same **6** 10 E--> 215 1 217 <210> SEQ ID NO: 8 218 <211> LENGTH: 10 219 <212> TYPE: PRT 220 <213> ORGANISM: Mus musculus 222 <220> FEATURE: 223 <223> OTHER INFORMATION: 225 <400> SEQUENCE: 8 226 Ser Ala Şer Ser Ser Val Ser Tyr Met His **\**5 E--> 227 1 10 229 <210> SEQ ID NO: 9 230 <211> LENGTH: 7 231 <212> TYPE: PRT 232 <213> ORGANISM: Mus musculus 234 <220> FEATURE: 235 <223> OTHER INFORMATION:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/009,723

237 <400> SEQUENCE: 9

Input Set : A:\ES.txt

```
Hunder anend auch render every > anend
     238 Asp Thr Ser Lys Leu Pro Ser
                 E--> 239 1
     241 <210> SEQ ID NO:
     242 <211> LENGTH: 9
     243 <212> TYPE: PRT
     244 <213> ORGANISM: Mus musculus
     246 <220> FEATURE:
     247 <223> OTHER INFORMATION:
     249 <400> SEQUENCE: 10
     250 Gln Gln Trp Ser Ser Asn Pro Pro Thr
                 (5)
E--> 251 1
                                  (9
     253 <210> SEQ ID NO: 11
     254 <211> LENGTH: 5
     255 <212> TYPE: PRT
     256 <213> ORGANISM: Mus musculus
     258 <220> FEATURE:
     259 <223> OTHER INFORMATION:
     261 <400> SEQUENCE: 11
     262 Asn Tyr Asn Met His
E--> 263 1
                 (5)
     265 <210> SEO ID NO: 12
     266 <211> LENGTH: 17
     267 <212> TYPE: PRT
     268 <213> ORGANISM: Mus musculus
     270 <220> FEATURE:
     271 <223> OTHER INFORMATION:
     273 <400> SEQUENCE: 12
     274 Ala Ile Phe Pro Gly Asn Gly Phe Thr Ser Tyr Asn Gln Lys Phe Lys
E--> 275 1
                              10
                                         15
     276 Gly
     277 17
     279 <210> SEQ ID NO: 13
     280 <211> LENGTH: 8
     281 <212> TYPE: PRT
     282 <213> ORGANISM: Mus musculus
     284 <220> FEATURE:
     285 <223> OTHER INFORMATION:
     287 <400> SEQUENCE: 13
     288 Asp Gly Asp Tyr Tyr Phe Asp Tyr
E--> 289 1
     291 <210> SEQ ID NO: 14
     292 <211> LENGTH: 10
     293 <212> TYPE: PRT
     294 <213> ORGANISM: Mus musculus
     296 <220> FEATURE:
     297 <223> OTHER INFORMATION:
     299 <400> SEQUENCE: 14
     300 Ser Ala Sør Ser Ser Val Ser Tyr Met His
E--> 301 1
                  5
                              10
```

TIME: 07:56:07

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Input Set : A:\ES.txt
                     Output Set: N:\CRF3\01142002\J009723.raw
     303 <210> SEQ ID NO: 15
     304 <211> LENGTH: 7
     305 <212> TYPE: PRT
     306 <213> ORGANISM: Mus musculus
     308 <220> FEATURE:
     309 <223> OTHER INFORMATION:
     311 <400> SEQUENCE: 15
     312 Arg Thr Ser Asn Leu Ala Ser
E--> 313 1
     315 <210> SEQ ID NO:
     316 <211> LENGTH: 7
     317 <212> TYPE: PRT
     318 <213> ORGANISM: Mus musculus
     320 <220> FEATURE:
     321 <223> OTHER INFORMATION:
     323 <400> SEQUENCE: 16
     ( 5
E--> 325 1
E--> 394 <210> SEQ ID NO: (22) 23
     395 <211> LENGTH: 33
     396 <212> TYPE: DNA
     397 <213> ORGANISM: Artificial Sequence
     399 <220> FEATURE:
     400 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
 -> 402 <400> SEQUENCE: 23
     403 cgttcggagg ggggaccaag ctggaaataa aac
                                                                            33
E-> 405 (210> SEQ ID NO: 24 ignore - this is due to above error
     488 <210> SEQ ID NO: 31
     489 <211> LENGTH: (421) 4/5 (p.5)
     490 <212> TYPE: DNA
     491 <213> ORGANISM: Artificial Sequence
     493 <220> FEATURE:
     494 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
     496 <220> FEATURE:
     497 <221> NAME/KEY: CDS
     498 <222> LOCATION: (1)..(420)
     500 <400> SEQUENCE: 31
     501 atg gaa tgg aac tgg gtc gtt ctc ttc ctc ctg tca tta act gca ggt 48
     502 Met Glu Trp Asn Trp Val Val Leu Phe Leu\Leu Ser Leu Thr Ala Gly
                                                                                misalysed
hos.
W--> 503 -19
                 -15
                              -10
                                            - 5
     504 gtc tat gcc cag gtg cag ctg gtg cag tct ggg gct gag gtg aag aag 96
     505 Val Tyr Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
W--> 506
            \begin{pmatrix} -1 & 1 \end{pmatrix}
                      5
                                      10
     507 cct ggc gcc tca gtg aag gtc tcc tgc aag gct tct gga tac acc ttc 144
     508 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
                        20
                                    25
     510 age agt aac tat ata agt tgg gtg ega eag gee eet gga eaa ggg ett 192
     511/ser Ser Asn Tyr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
W--> 512(30)
                      35
                                  40
                                              45
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/009,723

```
PATENT APPLICATION: US/10/009,723
                                                                TIME: 07:56:07
                      Input Set : A:\ES.txt
                      Output Set: N:\CRF3\01142002\J009723.raw
     513 gag tgg atg gga tgg att tat gct gga act ggt gat gcc agc tat aat 240
     514 Glu Trp_Met Gly Trp Ile Tyr Ala Gly Thr Gly Asp Ala Ser Tyr Asn
                  50
                               55
                                            60
     516 cag aag <del>tte aca gee aga gte ace att a</del>ce gte gae aca tee acg age 288
     517 Gln Lys Phe Thr Ala Arg Val Thr Ile Thr Val Asp Thr Ser Thr Ser
               (65
                             70
                                          75
     519 aca gc<del>c tac atg gag etg age age ctg a</del>ga tet gag gac acg gcc gtg 336
     520 Thr, Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
W--> 521
              80
                           85
                                        90
     522 tat ta<del>c tgt geg aga cac ggg ggg</del> gac ggc tac tgg ttt gct tac tgg 384
     523 Tyr Tyr Cys Ala Arg His Gly Gly Asp Gly Tyr Trp Phe Ala Tyr Trp
                        100
                                     105
     525 ggc cag gga acc ctg gtc acc gtc tcc tca g
     526 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
E--> 527 110
                      115
     642 <210> SEQ ID NO: 39
     643 <211> LENGTH: 87
     644 <212> TYPE: DNA
     645 <213> ORGANISM: Artificial Sequence
     647 <220> FEATURE:
     648 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
     650 <400> SEQUENCE: 39
W--> 651 caggaaacag ctatgacgaa ttccaccatg gattttcaag tgcagatttt cagcttcctg 60ctaatcagtg YeAurn
EX-> 652 cctcagtcat aatatcc
     654 <210> SEQ ID NO: 40
     655 <211> LENGTH: 93
     656 <212> TYPE: DNA
     657 <213> ORGANISM: Artificial Sequence
     659 <220> FEATURE:
     660 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
     662 <400> SEQUENCE: 40aagtgatggt gactctgtct cctacagatg cagacaggga ggatggagac tgggtcatct
60) per dum 1 on Every Shert Tinsert a hard return
E--> 663 ggatatetec tetggatatt atgactgagg cac
                                                                              93
     974 <210> SEQ ID NO: 63
     975 <211> LENGTH: 8 85 Shown
     976 <212> TYPE: DNA
     977 <213> ORGANISM: Artificial Sequence
     979 <220> FEATURE:
     980 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
     982 <400> SEQUENCE: 63
     983 agacagagte accateaett gtagtgeeag etegagtgta agttaeatge actggtatea 60
E--> 984 gcagaaacca gggaaagccc ctaag
     1282 <210> SEQ ID NO: 82
     1283 <211> LENGTH: 138
     1284 <212> TYPE: PRT
     1285 <213> ORGANISM: Mus musculus
     1287 <220> FEATURE:
     1288 <223> OTHER INFORMATION:
     1290 <400> SEQUENCE: 82
     1291 Met Glu Trp Asn Trp Val Val Leu Phe Leu Leu Ser Leu Thr Ala Gly
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RAW SEQUENCE LISTING

Input Set : A:\ES.txt

```
1292 -19
     1293 Val Tyr Ala Gln Gly Gln Met Gln Gln Ser Gly Ala Glu Leu Val Lys
E--> 1294 (f-1 1 5 10)
     1295 Pro Gly Ala Ser Val Lys Leu Ser Cys Lys Pro Ser Gly Phe Thr Phe
E--> 1296 (15 20 25)
                                                                      misaligned
NOS.
     1297 Ser Ser Asn Tyr Ile Ser Trp Leu Lys Gln bys Pro Gly Gln Ser Leu
E--> 1298 (30 35
                                40_
                                            45
     1299 Glu Trp Ile Ala Trp Ile Tyr Ala Gly Thr Gly Asp Ala Ser Tyr Asn
               <u>__50_</u>
E--> 1300
                         55
                                 60
     1301 Gln Lys Phe Thr Ala Lys Ala His Val Thr Val Asp Thr Ser Ser
                                75
E--> 1302 (65 70
     1303 Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Thr Glu Asp Ser Ala Ile
E--> 1304 \( 80 \) 85 ____
                                    90
1305 Tyr Tyr Cys Ala Arg His Gly Gly Asp Gly Tyr Trp Phe Ala Tyr Trp E--> 1306 95 100 105
     1307 Gly Gln Gly Thr Leu Val Thr Val Ser Ala
                                   (119)
E--> 1308(110 115
     1310 <21<del>0> SEQ ID NO: 83</del>
     1311 <211> LENGTH: 128
     1312 <212> TYPE: PRT
     1313 <213> ORGANISM: Mus musculus
     1315 <220> FEATURE:
     1316 <223> OTHER INFORMATION:
     1318 <400> SEQUENCE: 83
     1319 Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
E--> 1320 -22 -20
                    -15
    1321 Val Ile Ile Ser Arg Gly Gln Leu Val Leu Thr Gln Ser Pro Ala Ile
E--> 1322 -5 -1 1
                             5
    1323 Met Ser Ala Ser Gln Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser
E--> 1324 15 20
    1325 Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Same

1326 30 35 40

1327 Pro Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Pro Ser Gly Val Pro
E--> 1326 30 35
E--> 1328 45 50
    1329 Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
E--> 1330 60
                    65
                                70
    1331 Ser Ser Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp
E--> 1332 75 80
                                85
    1333 Ser Ser Asn Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
E--> 1334
                  95
                                      105 (106)
                            100
    1336 <210> SEQ ID NO: 84
    1337 <211> LENGTH: 136
    1338 <212> TYPE: PRT
    1339 <213> ORGANISM: Mus musculus
    1341 <220> FEATURE:
    1342 <223> OTHER INFORMATION:
    1344 <400> SEQUENCE: 84
    1345 Met Gly Phe Ser Arg Ile Phe Leu Phe Leu Ser Val Thr Thr Gly
E--> 1346 -19
               -15
                            -10
                                     - 5
```

TIME: 07:56:07 PATENT APPLICATION: US/10/009,723 Input Set : A:\ES.txt Output Set: N:\CRF3\01142002\J009723.raw 1347 Val His Ser Gln Ala Phe Leu Gln Gln Ser Gly Ala Glu Leu Val Arg E--> 1348 -1 1 5 1349 Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly Tyr Thr Phe E--> 1350 15 20 25 1351 Ile Asn Tyr Asn Met His Trp Val Lys Gln Thr Pro Arg Gln Gly Leu 35 40 1353 Glu Trp Ile Gly Ala Ile Phe Pro Gly Asn Gly Phe Thr Ser Tyr Asn E--> 1354 50 55 60 1355 Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Lys Ser Ser Ser E--> 1356 65 70 75 1357 Thr Val Tyr Met Gln Leu Arg Ser Leu Thr Ser Glu Asp Ser Ala Val E--> 1358 80 85 90 1359 Tyr Phe Cys Ala Arg Asp Gly Asp Tyr Tyr Phe Asp Tyr Trp Gly Gln 95 100 105 1361 Gly Thr Thr Leu Thr Val Ser Ser E--> 1362 110 115 (117)1364 <210> SEQ ID NO: 85 1365 <211> LENGTH: 126 1366 <212> TYPE: PRT 1367 <213> ORGANISM: Mus musculus 1369 <220> FEATURE: 1370 <223> OTHER INFORMATION: 1372 <400> SEQUENCE: 85 1373 Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser E--> 1374 -22 -20 -15 -10 1375 Val Ile Met Ser Arg Gly Gln Ile Val Leu Thr Gln Ser Pro Ala Ile -1 1 E--> 1376 -5 5 10 1377 Met Ser Ala Ser Leu Gly Glu Glu Ile Thr Leu Thr Cys Ser Ala Ser E--> 1378 15 20 25 1379 Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Ser Gly Thr Ser E--> 1380 30 35 40 1381 Pro Lys Leu Leu Ile Tyr Arg Thr Ser Asn Leu Ala Ser Gly Val Pro E--> 1382 45 50 1383 Phe Arg Phe Ser Gly Ser Gly Ser Gly Thr Phe Tyr Ser Leu Thr Ile 65 70 1385 Ser Ser Val Glu Ala Glu Asp Ala Ala Asp Tyr Tyr Cys His Gln Trp E--> 1386 75 80 Lys Leu Glu Ile Lys

(104) number ble amen's acres words

every

any

and

and 1387 Ser Met Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 95 100 1390 <210> SEQ ID NO: 86 1391 <211> LENGTH: 140 ) / 3 8 1392 <212> TYPE: PRT 1393 <213> ORGANISM: Artificial Sequence 1395 <220> FEATURE:

1396 <223> OTHER INFORMATION: Description of Artificial Sequence: Humanized antibody

1399 Met Glu Trp Asn Trp Val Val Leu Phe Leu Leu Ser Leu Thr Ala Gly

1401 Val Tyr Ala Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys

-5

-10

RAW SEQUENCE LISTING

1398 <400> SEQUENCE: 86

E--> 1400 -19 -15

same

Input Set : A:\ES.txt

```
E--> 1402 -1 1
                                     10
     1403 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
E--> 1404 15
                 20
     1405 Ser Ser Asn Tyr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
E--> 1406 30 35
                                40
     1407 Glu Trp Met Gly Trp Ile Tyr Ala Gly Thr Gly Asp Ala Ser Tyr Asn
                          55
              50
                                        60
     1409 Gln Lys Phe Thr Ala Arg Val Thr Ile Thr Val Asp Thr Ser Thr Ser
E--> 1410 65
                     70
     1411 Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
E--> 1412
          80
                  8.5
                                     90
    1413 Tyr Tyr Cys Ala Arg His Gly Gly Asp Gly Tyr Trp Phe Ala Tyr Trp
           95 100
                                  105
     1415 Gly Gln Gly Thr Leu Val Thr Val Ser Ser
E--> 1416 110
                    115
     1418 <210> SEQ ID NO: 87
     1419 <211> LENGTH: 136
     1420 <212> TYPE: PRT
     1421 <213> ORGANISM: Artificial Sequence
     1423 <220> FEATURE:
     1424 <223> OTHER INFORMATION: Description of Artificial Sequence: Humanized antibody
     1426 <400> SEQUENCE: 87
     1427 Met Gly Phe Ser Arg Ile Phe Leu Phe Leu Leu Ser Val Thr Thr Gly
                        -15
                                            -10
     1429 Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
    1430
             -1 1
    1431 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe
    1432 15
                                 20
    1433 Ile Asn Tyr Asn Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
                             35
    1435 Glu Trp Met Gly Ala Ile Phe Pro Gly Asn Gly Phe Thr Ser Tyr Asn
    1437 Gln Lys Phe Lys Gly Arg Val Thr Ile Thr Val Asp Lys Ser Thr Ser
    1439 Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
                                     85
                                                       90
    1441 Tyr Tyr Cys Ala Arg Asp Gly Asp Tyr Tyr Phe Asp Tyr Trp Gly Gln
E--> 1442 100
                            105
    1443 Gly Thr Leu Val Thr Val Ser Ser
E--> 1444 110
                            115
    1446 <210> SEQ ID NO: 88
    1447 <211> LENGTH: 128
    1448 <212> TYPE: PRT
    1449 <213> ORGANISM: Artificial Sequence
    1451 <220> FEATURE:
    1452 <223> OTHER INFORMATION: Description of Artificial Sequence: Humanized antibody
    1454 <400> SEQUENCE: 88
    1455 Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
                                      -10) misabgred nos.
E--> 1456 -22 \( \bigg \) -20
```

Input Set : A:\ES.txt

```
1457 Val Ile Ile Ser Arg Gly Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
E--> 1458 -5 -1 1 5
    1459 Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser
                                                                 misaligned
NOS,
E--> 1460 15 20
    1461 Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Lys Ala
E--> 1462 30 35 40
    1463 Pro Lys Leu Leu Ile Tyr Asp Thr Ser Lys Leu Pro Ser Gly Val Pro
E--> 1464 45 50
    1465 Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
E--> 1466 60 65 70
    1467 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Trp
E--> 1468 75 80 85
                                         90
    1469 Ser Ser Asn Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
                                     105 (106) delete - runber the anew ours
under every 5 arrives
E--> 1470 95
                          100
    1498 <210> SEQ ID NO: 90
    1499 <211> LENGTH: 126
    1500 <212> TYPE: PRT
    1501 <213> ORGANISM: Artificial Sequence
    1503 <220> FEATURE:
    1504 <223> OTHER INFORMATION: Description of Artificial Sequence: Humanized antibody
    1506 <400> SEQUENCE: 90
    1507 Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
    1509 Val Ile Ile Ser Arg Gly Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
    1510 -5 -1 1
    1511 Leu Ser Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser
    1513 Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Lys Ala
E--> 1514 30
                                     35
                                                        40Pro Lys Leu Leu Ile Tyr
                                                         Timent hard return
E--> 1515 Arg Thr Ser Asn Leu Ala Ser Gly Val Pro
E--> 1516 45
                                                    55
    1517 Ser Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
E--> 1518 60
                              65
    1519 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys His Gln Trp
E--> 1520 75 80
    1521 Ser Met Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
E--> 1522
    1552 <210> SEQ ID NO: 92
    1553 <211> LENGTH: 126
    1554 <212> TYPE: PRT
    1555 <213> ORGANISM: Artificial Sequence \rho. \rho
    1557 <220> FEATURE:
    1558 <223> OTHER INFORMATION: Description of Artificial Sequence: Humanized antibody
    1560 <400> SEQUENCE: 92
    1561 Met Asp Phe Gln Val Gln Ile Phe Ser Phe Leu Leu Ile Ser Ala Ser
    1562 -22 -20
                                -15
    1563 Val Ile Ile Ser Arg Gly Asp Ile Gln Met Thr Gln Ser Pro Ser Ser
    1565 Leu Ser Ala Ser Val Gly Glu Glu Val Thr Ile Thr Cys Ser Ala Ser
```

Input Set : A:\ES.txt

Output Set: N:\CRF3\01142002\J009723.raw

	1566					15					20					25			
	1567	Ser	Ser	Val	Ser	Tyr	Met	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala		
	1568				30					35					40				
	1569	Pro	Lys	Leu	Leu	Ile	Tyr	Arg	Thr	Ser	Asn	Leu	Ala	Ser	Gly	Val	Pro		
	1570			45					50					55					. 0 -
	1571	Ser	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Phe	Tyr	Thr	Leu	Thr	Ile	c- fix	this
E>	1572		60					65					70	70	•			C-18-1	-,,
	1573	Ser	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	His	Gln	Trp	U	
	1574	75					80					85					90		
	1575	Ser	Met	$\mathtt{Tyr}$	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys				
	1576					95					100				104	) ^			
														`		[] [	1		
															0	XXX	w	/	

Dle het page for more enou

<210> 52 Unseit a Land neturn

<211> 379<212> DNA

<213> Artificial Sequence

same ever in Seg. 78

Box sev the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY DATE: 01/14/2002 PATENT APPLICATION: US/10/009,723 TIME: 07:56:08

Input Set : A:\ES.txt

```
L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:35 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:38 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:41 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:44 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:47 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:50 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:53 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:56 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:59 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:76 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:79 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:82 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:85 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:88 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:91 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:94 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:97 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:2
L:115 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:118 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:121 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:124 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:127 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:130 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:132 M:254 E: No. of Bases conflict, LENGTH:Input:80 Counted:384 SEQ:3
L:132 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:132 M:112 C: (48) String data converted to lower case,
M:254 Repeated in SeqNo=3
L:136 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:139 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:139 M:252 E: No. of Seq. differs, <211>LENGTH:Input:409 Found:457 SEQ:3
L:156 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:159 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:162 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:165 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:168 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:171 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:174 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:177 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:4
L:189 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5
L:201 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6
L:215 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:7
L:227 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:8
L:239 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:9
L:251 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:10
L:263 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:11
```

## VERIFICATION SUMMARY DATE: 01/14/2002 PATENT APPLICATION: US/10/009,723 TIME: 07:56:08

Input Set : A:\ES.txt

```
L:275 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:12
L:289 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:13
L:301 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:14
L:313 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:15
L:325 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
L:394 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO:22
L:402 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:22 differs:23
L:405 M:214 E: (33) Seq.# missing, SEQ ID NO:23
L:503 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:506 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:509 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:512 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:515 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:518 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:521 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:524 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:527 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:31
L:527 M:252 E: No. of Seq. differs, <211>LENGTH:Input:421 Found:415 SEQ:31
L:651 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
L:652 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:39
L:652 M:254 E: No. of Bases conflict, LENGTH:Input:87 Counted:17 SEQ:39
L:652 M:252 E: No. of Seq. differs, <211>LENGTH:Input:87 Found:17 SEQ:39
L:663 M:254 E: No. of Bases conflict, LENGTH:Input:93 Counted:33 SEQ:40
L:663 M:252 E: No. of Seq. differs, <211>LENGTH:Input:93 Found:33 SEQ:40
L:728 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:731 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:734 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:737 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:740 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:743 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:746 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:45
L:835 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:904 M:112 C: (48) String data converted to lower case,
L:984 M:252 E: No. of Seq. differs, <211>LENGTH:Input:8 Found:85 SEQ:63
L:1216 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:1294 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:82
M:332 Repeated in SeqNo=82
L:1320 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:83
M:332 Repeated in SeqNo=83
L:1346 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:84
M:332 Repeated in SeqNo=84
L:1374 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:85
M:332 Repeated in SeqNo=85
L:1400 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:86
M:332 Repeated in SeqNo=86
L:1416 M:252 E: No. of Seq. differs, <211>LENGTH:Input:140 Found:138 SEQ:86
L:1442 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:87
M:332 Repeated in SeqNo=87
L:1444 M:252 E: No. of Seq. differs, <211>LENGTH:Input:136 Found:120 SEQ:87
```

VERIFICATION SUMMARY DATE: 01/14/2002 PATENT APPLICATION: US/10/009,723 TIME: 07:56:08

Input Set : A:\ES.txt

Output Set: N:\CRF3\01142002\J009723.raw

L:1456 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:88

M:332 Repeated in SeqNo=88

L:1514 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:90 L:1514 M:333 E: Wrong sequence grouping, Amino acids not in groups!

M:332 Repeated in SeqNo=90

L:1522 M:252 E: No. of Seq. differs, <211>LENGTH:Input:126 Found:125 SEQ:90

L:1572 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:92